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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--|-------------|----------------------|------------------------|------------------|
| 10/014,514 | 12/14/2001 | Hoang-Yan Lin | 3313-0441P-SP | 3583 |
| 2292 | 7590 | 10/20/2003 | EXAMINER | |
| BIRCH STEWART KOLASCH & BIRCH PO BOX 747 FALLS CHURCH, VA 22040-0747 | | | MAHONEY, CHRISTOPHER E | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 2851 | |

DATE MAILED: 10/20/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/014,514

Applicant(s)

LIN ET AL.

Examiner

Christopher E Mahoney

Art Unit

2851

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 September 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2 and 5-11 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2 and 5-11 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Priority

Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-2, 5-6 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Minoura (U.S. Patent No. 5,146,365) in view of Van de Ven (U.S. Patent No. 6,151,162). Minoura teaches a rear projection screen with a field lens made of a Fresnel lens 16a, which receives light from a reflective mirror 14, 15. A diffusive plate 16b is located on the output side of the Fresnel lens and is comprised of lenticular lenses. A diffuser 17/18 may be located on the input side of the field lens. The applicant is directed to review figures 1, 2, 5, 6, and 9 as well as col. 2, lines 40-64, col. 3, lines 16-65, and col. 4, lines 44-49. The diffuser may be a rough frosted surface or a fly eye lens. Minoura does not teach reducing the Fresnel lens in order to eliminate ghost images nor does it teach that the Fresnel lens is thinner than 0.5 mm. Van de Ven teaches in col. 3, lines 55-61 that it was known to minimize the Fresnel lens thickness (to preferably thinner than 0.5 mm) in order to eliminate ghost images. It would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize the features as taught by Van de Ven for the purpose of producing a clearer image.

Claims 7-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Minoura (U.S. Patent No. 5,146,365) in view of Van de Ven (U.S. Patent No. 6,151,162). Minoura teaches the features of the claimed invention except for the specific method of manufacturing. It would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize any method of manufacturing because the applicant does not disclose that the specific methods solve any problem or are for a particular purpose and it appears that any well known manufacturing method would work. The purpose of using methods of manufacturing such as UV curing, AB gluing, injection molding, press molding, etc. is to utilize readily available manufacturing processes/techniques. It makes manufacturing cost effective. The examiner also notes that the method of manufacture does not limit the specific structure of the claimed invention.

Claims 7-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Minoura (U.S. Patent No. 5,146,365)) in view of Van de Ven (U.S. Patent No. 6,151,162), and further in view of Langille (U.S. Patent No. 5,837,346). Minoura in view of Van de Ven teaches the features of the claimed invention except for the specific method of manufacturing. Langille teaches in col. 3, line 60 and col. 4, line 2 that different methods of manufacturing were known. It would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize the features as taught by Langille for the purpose of substituting one well known method of manufacture for another.

Response to Arguments

Applicant's arguments with respect to the claims have been considered but are moot in view of the new ground(s) of rejection. The applicant argues that Minoura does not teach the reduced thickness to eliminate ghost images. Such a feature is taught by Van de Ven.

The applicant additionally argues that the method of making imparts the structural limitation to the claimed invention in that the Fresnel lens is integral with the diffusing, light incident surface. Minoura already teaches that the Fresnel lens 16 may be made integral with the diffusing light incident surface 18 as evidenced by figure 9. The examiner also notes that it has been held that forming in one piece an article which has formerly been formed in two pieces and put together involves only routine skill in the art. *Howard v. Detroit Stove Works*, 150 U.S. 164 (1893). Furthermore, while figure 6 may or may not disclose that the diffusing surface 40 is integral with the Fresnel lens, there is no discussion of this or its advantages in the specification. The only thing discussed in the specification is that the lens may be made by the different methods.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The additionally cited references teach that it was known to reduce Fresnel lens thickness to eliminate ghost images.

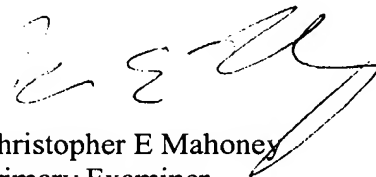
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher E Mahoney whose telephone number is (703) 305-3475. The examiner can normally be reached on 8:30AM-5PM, Monday-Thursday.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Russ Adams can be reached on (703) 308-2847. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.



Christopher E Mahoney
Primary Examiner
Art Unit 2851